

amylase, APS and an acid, amylase and protease or a combination thereof, and introducing the treated flour into the fiber matrix in one step.

8. (Amended Twice) A method for manufacturing paper from a starting paper fiber mass, wherein vegetable material of a high protein and starch content is processed completely, comprising separating the vegetable material into (a) a fraction substantially consisting of the cellulose material and (b) a fraction substantially consisting of the protein and starch material, feeding fraction (a) into the starting paper fiber mass to form a mixed paper fiber mass, treating fraction (b) with ammonium persulfate (APS) and protease, APS and amylase, APS and an acid, amylase and protease or a combination thereof, and introducing the treated fraction (b) into the mixed paper fiber mass in one step.

9. (Amended Twice) Paper or cardboard having improved strength properties, stiffness properties, permeability, surface properties and elasticity comprising:

a paper fiber matrix; and

vegetable material having as main components protein and starch;

wherein said protein and starch are degraded with ammonium persulfate (APS) and a proteolytic enzyme, [ammonium persulfate] APS and protease, APS and amylase, APS and an acid, amylase and protease or combinations thereof before being introduced into the paper fiber matrix.

10. (Amended Twice) A glue for forming the corrugations in corrugated cardboard, said glue comprising:

vegetable material having as main components protein and starch;
wherein said protein and starch are degraded with ammonium persulfate (APS) and a proteolytic enzyme, [ammonium persulfate] APS and protease, APS and amylase, APS and an acid, amylase and protease or combinations thereof.

12. (Amended) The paper or cardboard according to claim 1, wherein the components are subjected to degradation with protease, [and] ammonium persulfate, and an acid.

13. (Amended) The paper or cardboard according to claim 1, wherein the components are subjected to degradation with protease and amylase and then heated.

18. (Amended) The method for manufacturing paper or cardboard according to claim 5, wherein protease and amylase are added to the flour and then heated..

REMARKS

The applicants have amended the claims so that the degrading agent is ammonium persulfate (APS) and protease, APS and amylase, APS and an acid, amylase and protease or a combination thereof. Support for this amendment is found in the specification at page 6, lines 26-36, page 12,